PARVATI JAYAKUMAR

Data Scientist | Specializing in Data Analysis, ML, and Cloud-Tech across different domains

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SKILLS

Python | R | SQL | MATLAB | Power BI | Tableau | MySQL | PostgreSQL | MongoDB | Git | Streamlit | Docker | Microsoft Fabric | Azure (Data Warehousing, Machine Learning) | AWS | Statistics | Agile Methodology

Creative Thinking | Adaptability | Team work | Time management | Communication

EDUCATION

Master of Science (Data Science)
University of Washington (GPA: 3.94/4)
2023 - 2025 | Seattle, WA, USA

Bachelor of Technology (ECE)
IIIT, Dharwad (GPA: 9.4/10)
2018 - 2022 | Karnataka, India

SKILL BUILDING

Machine Learning Nanodegree
Udacity (Sponsored by Microsoft)
Jul 2020 – Jan 2021 | Remote

Selected as one of 300 participants from over 36,500 applicants; hosted webinars and AMAs, published a technical magazine, and developed ML projects within the community.

ACHIEVEMENTS

- **President of India Gold Medal and Department Gold Medal** for Academic Excellence (BTech, IIIT Dharwad)
- **Publications:**
  - TENCON 2022 – IEEE Region 10 Conference: Contributed to developing a Hindi Spoken Conversational System (Automatic Speech Recognition (ASR) and Text To Speech (TTS)), to humanize robotic interactions.
  - BSN 2023 and arXiv: Researched acoustic-based non-intrusive gait analysis for older adults, including developing a filter for robust detection in noisy indoor settings.
  - 2 in progress (MS, UW): Collaborated on a capstone project investigating Ventilator-Associated Pneumonia (VAP) pathogen-specific biomarker signatures and subphenotypes to improve clinical outcomes.

EXPERIENCE

Graduate Research Assistant
UW Scientific Software Engineering Center, eScience Institute
Sep 2024 - Jun 2025 | Seattle, WA, US

- Integrated DeepEval into the **OLMo2** Retrieval-Augmented Generation **(RAG)** pipeline, achieving a test score rating of **8.3/10**, ensuring reliability of search results in support of Vera C. Rubin Observatory research.
- Engineered a fully automated financial disclosure system using **Apps Script** and **Power Automate**, processing 100% of disclosures within 24 hours of opening for the UW Office of Research team.
- Pioneered the user interface development of a **Flutter app** for the Post-Disaster Communications project, enabling field teams to achieve faster data transmission speeds during emergencies.

Data Science Intern
Pearson Packaging Systems
Jun 2024 – Sep 2024 | Spokane, WA, US

- Engineered a Power BI dashboard for the Inventory Department that enabled reporting; helped in improving on-time delivery rates to **95%** and cut material costs by **50%**.
- Spearheaded the **Data Warehouse** pilot project, establishing a functional instance and creating a detailed **Microsoft Fabric** implementation plan that aims to reduce potential deployment delays by **25%**.

Graduate Research Assistant
UW School of Medicine - Department of Otolaryngology-HNS
Feb 2024 - Sep 2024 | Seattle, WA, US

- Explored auditory perception across ages (infants/children) and environments using EEG, experimental design, and advanced MATLAB-based mTRF analyses for encoding/decoding, aiming to improve human communication understanding.

Clinical Data Scientist (R&D)
MiiCare
Nov 2021 – Jun 2023 | Remote (London, UK)

- Developed and maintained streamlined reports on **health data for 300+** seniors and disabled individuals, enabling rapid, data-driven assessments for early detection of critical mental and physical health concerns.
- Led the development of MiiVoice, a voice-based mental health prediction system using **speech processing** and contributed to **NLP projects**, increasing customer engagement by **29%** (2021 Dec - 2023 Jun).
- Developed a ML model to classify **Acoustic Gait patterns** using footstep sounds and achieved $\leq$ **0.71%** relative error compared to IMU (Inertial Measurement Unit) and video-based systems (tested on 10 users).

Summer Intern
Indian Institute of Science (IISc)
May 2019 – Jul 2019 | Bengaluru, India

- Contributed to a facial recognition project, implementing a Facenet model in PyTorch, at the Department of Aerospace Engineering.